AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method in a router, the method comprising:

identifying by the router an active path connected to the router and including at least first and second active links each terminated by the router and connecting the router to a first neighboring router that terminates the first and second active links, the first and second active links each configured for sending or receiving Internet Protocol (IP) data packets;

monitoring by the router prescribed attributes of the active path, the active path providing reachability by the router to a destination via the first neighboring router, the prescribed attributes of the active path based on an aggregation of at least selected ones of the prescribed attributes of the first active link and the second active link;

detecting by the router a change in at least one of the prescribed attributes of the connected active path, the change distinct from and not changing an availability of the active path; and

outputting by the router an update message, specifying the change in the active path, to a second neighboring router in response to the detected change and according to a prescribed routing protocol.

2. (CURRENTLY AMENDED) The method of claim 1, wherein the identifying step includes:

associating the first active link connected to the ~~ro uter~~ router to the active path based on determining that the destination is reachable by the first active link; and

storing in a topology table an entry that specifies the destination and a corresponding at least one interface identifier for the first active link.

3. (PREVIOUSLY PRESENTED) The method of claim 2, wherein the identifying step further includes:

associating the second active link connected to the router to the active path based on determining that the destination is concurrently reachable by the first active link and the second active link;

determining that the first active link and the second active link are configured for enabling aggregation;

aggregating the selected ones of the prescribed attributes of the first active link and the second active link for the respective selected ones of the prescribed attributes of the active path; and

storing in the entry in the topology table the prescribed attributes of the active path, and adding a second entry that specifies the destination, the interface identifier for the second active link, and the prescribed attributes of the active path.

4. (PREVIOUSLY PRESENTED) The method of claim 3, wherein the detecting step includes detecting aggregation of the selected ones of the prescribed attributes of the first active link and the second active link for the respective selected ones of the prescribed attributes of the active path.

5. (PREVIOUSLY PRESENTED) The method of claim 4, wherein the detecting step includes detecting a change in any one of delay, bandwidth, allowable transmission unit size, hop count, reliability, or load as the prescribed attributes.

6. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the detecting step includes detecting a change in any one of delay, bandwidth, allowable transmission unit size, hop count, reliability, or load as the prescribed attributes.

7. (PREVIOUSLY PRESENTED) The method of claim 6, wherein the detecting step further includes obtaining information associated with at least one of the prescribed attributes of the first active link from an executable driver resource configured for controlling an interface configured for establishing the first active link.

8. (PREVIOUSLY PRESENTED) The method of claim 7, wherein the information includes any one of the bandwidth, the reliability, the load or the allowable transmission unit size.

9. (PREVIOUSLY PRESENTED) The method of claim 6, wherein the detecting step further includes determining the delay based on measuring a time between transmitting a data packet onto the first link and receiving a response to the data packet via the first link.

10. (ORIGINAL) The method of claim 1, wherein the prescribed routing protocol is Enhanced Interior Gateway Routing Protocol (EIGRP) protocol.

11. (CURRENTLY AMENDED) A router comprising:

a plurality of interfaces configured for establishing respective active links, including first and second active links each terminated by a corresponding one of the interfaces and connecting the router with a first neighboring router the terminates the first and second active links, and the active links including a third active link terminated by a corresponding one of the interfaces and connecting the router with a second neighboring router that terminates the third active link, the first and second active links each configured for sending or receiving Internet Protocol (IP) data packets;

a link associating resource configured for associating an active path connected to the router with at least the first and second active links that are connected to the router, the active path providing reachability by the router to an identifiable destination via the first neighboring router;

a monitoring resource configured for monitoring prescribed attributes of the active path connected to the router, the prescribed attributes of the active path based on an aggregation of at least selected ones of the prescribed attributes of the first active link and the second active link, the monitoring resource detecting a change in at least one of the prescribed attributes of the connected active path, the change distinct from and not changing an availability of the connected active path; and

a routing protocol resource configured for outputting an update message, specifying the change in the connected active path, to the second neighboring router in response to the detected change and according to a prescribed routing protocol.

12. (PREVIOUSLY PRESENTED) The router of claim 11, further comprising a topology

table configured for storing entries, each entry identifying a destination and whether the corresponding destination is reachable;

wherein the link associating resource is configured for associating the first active link connected to the router to the active path based on determining that the identifiable destination is reachable by the first active link, the link associating resource configured for storing in the topology table an entry that specifies the identifiable destination and a corresponding interface identifier for the first active link.

13. (PREVIOUSLY PRESENTED) The router of claim 12, wherein:

the link associating resource is configured for associating the second active link connected to the router to the active path based on determining that the identifiable destination is concurrently reachable by the first active link and the second active link, and determining that the first active link and the second active link are configured for enabling aggregation;

the link associating resource is configured for aggregating the selected ones of the prescribed attributes of the first active link and the second active link for the respective selected ones of the prescribed attributes of the active path;

the link associating resource is configured for storing in the entry in the topology table the prescribed attributes of the active path, and adding a second entry that specifies the identifiable destination, the interface identifier for the second active link, and the prescribed attributes of the active path.

14. (PREVIOUSLY PRESENTED) The router of claim 13, wherein the monitoring resource is configured for detecting aggregation of the selected ones of the prescribed attributes of the first active link and the second active link for the respective selected ones of the prescribed attributes of the active path.

15. (PREVIOUSLY PRESENTED) The router of claim 14, wherein the monitoring resource is configured for detecting a change in any one of delay, bandwidth, allowable transmission unit size,

hop count, reliability, or load as the prescribed attributes.

16. (PREVIOUSLY PRESENTED) The method of claim 11, wherein the monitoring resource is configured for detecting a change in any one of delay, bandwidth, allowable transmission unit size, hop count, reliability, or load as the prescribed attributes.

17. (PREVIOUSLY PRESENTED) The router of claim 16, wherein the monitoring resource is configured for obtaining information associated with at least one of the prescribed attributes of the first active link from an executable driver resource configured for controlling at least one of the interfaces.

18. (PREVIOUSLY PRESENTED) The router of claim 17, wherein the information includes any one of the bandwidth, the reliability, the load or the allowable transmission unit size.

19. (ORIGINAL) The router of claim 16, further comprising a delay measurement resource configured for determining the delay based on measuring a time between transmitting a data packet onto the first link and receiving a response to the data packet via the first link, the delay measurement resource reporting the determined delay to the monitoring resource.

20. (ORIGINAL) The router of claim 11, wherein the routing protocol resource is configured for outputting the update message according to Enhanced Interior Gateway Routing Protocol (EIGRP) protocol as the prescribed routing protocol.

21. (CURRENTLY AMENDED) A computer readable storage medium having stored thereon sequences of instructions for outputting an update message by a router, the sequences of instructions including instructions for:

identifying by the router an active path connected to the router and including at least first and second active links each terminated by the router and connecting the router to a first neighboring

router that terminates the first and second active links, the first and second active links each configured for sending or receiving Internet Protocol (IP) data packets;

monitoring by the router prescribed attributes of the active path, the active path providing reachability by the router to a destination via the first neighboring router, the prescribed attributes of the active path based on an aggregation of at least selected ones of the prescribed attributes of the first active link and the second active link;

detecting by the router a change in at least one of the prescribed attributes of the connected active path, the change distinct from and not changing an availability of the active path; and

outputting by the router an update message, specifying the change in the active path, to a second neighboring router in response to the detected change and according to a prescribed routing protocol.

22. (PREVIOUSLY PRESENTED) The medium of claim 21, wherein the identifying step includes:

associating the first active link connected to the router to the active path based on determining that the destination is reachable by the first active link; and

storing in a topology table an entry that specifies the destination and a corresponding at least one interface identifier for the first active link.

23. (PREVIOUSLY PRESENTED) The medium of claim 22, wherein the identifying step further includes:

associating the second active link connected to the router to the active path based on determining that the destination is concurrently reachable by the first active link and the second active link;

determining that the first active link and the second active link are configured for enabling aggregation;

aggregating the selected ones of the prescribed attributes of the first active link and the second active link for the respective selected ones of the prescribed attributes of the active path; and

storing in the entry in the topology table the prescribed attributes of the active path, and adding a second entry that specifies the destination, the interface identifier for the second active link, and the prescribed attributes of the active path.

24-25. (CANCELED).

26. (PREVIOUSLY PRESENTED) The medium of claim 21, wherein the detecting step includes detecting a change in any one of delay, bandwidth, allowable transmission unit size, hop count, reliability, or load as the prescribed attributes.

27. (PREVIOUSLY PRESENTED) The medium of claim 26, wherein the detecting step further includes obtaining information associated with at least one of the prescribed attributes of the at least one active link from an executable driver resource configured for controlling an interface configured for establishing the first active link.

28-29. (CANCELED).

30. (ORIGINAL) The medium of claim 21, wherein the prescribed routing protocol is Enhanced Interior Gateway Routing Protocol (EIGRP) protocol.

31. (CURRENTLY AMENDED) A router comprising:

means for identifying an active path connected to the router and including at least first and second active links each terminated by the router and connecting the router to a first neighboring router that terminates the first and second links, the first and second active links each configured for sending or receiving Internet Protocol (IP) data packets;

means for monitoring prescribed attributes of the active path, the active path providing reachability by the router to a destination via the first neighboring router, the prescribed attributes of the active path based on an aggregation of at least selected ones of the prescribed attributes of the

first active link and the second active link;

means for detecting a change in at least one of the prescribed attributes of the connected active path, the change distinct from and not changing an availability of the active path; and

means for outputting an update message, specifying the change in the active path, to a second neighboring router in response to the detected change and according to a prescribed routing protocol.

32. (PREVIOUSLY PRESENTED) The router of claim 31, wherein the identifying means is configured for:

associating the first active link connected to the router to the active path based on determining that the destination is reachable by the first active link; and

storing in a topology table an entry that specifies the destination and a corresponding at least one interface identifier for the first active link.

33. (PREVIOUSLY PRESENTED) The router of claim 32, wherein the identifying means is configured for:

associating the second active link connected to the router to the active path based on determining that the destination is concurrently reachable by the first active link and the second active link;

determining that the first active link and the second active link are configured for enabling aggregation;

aggregating the selected ones of the prescribed attributes of the first active link and the second active link for the respective selected ones of the prescribed attributes of the active path; and

storing in the entry in the topology table the prescribed attributes of the active path, and adding a second entry that specifies the destination, the interface identifier for the second active link, and the prescribed attributes of the active path.

34. (PREVIOUSLY PRESENTED) The router of claim 33, wherein the detecting means is configured for detecting aggregation of the selected ones of the prescribed attributes of the first

active link and the second active link for the respective selected ones of the prescribed attributes of the active path.

35. (PREVIOUSLY PRESENTED) The router of claim 34, wherein the detecting means is configured for detecting a change in any one of delay, bandwidth, allowable transmission unit size, hop count, reliability, or load as the prescribed attributes.

36. (PREVIOUSLY PRESENTED) The router of claim 31, wherein the detecting means is configured for detecting a change in any one of delay, bandwidth, allowable transmission unit size, hop count, reliability, or load as the prescribed attributes.

37. (PREVIOUSLY PRESENTED) The router of claim 36, wherein the detecting means is configured for obtaining information associated with at least one of the prescribed attributes of the first active link from an executable driver resource configured for controlling an interface configured for establishing the first active link.

38. (PREVIOUSLY PRESENTED) The router of claim 37, wherein the information includes any one of the bandwidth, the reliability, the load or the allowable transmission unit size.

39. (PREVIOUSLY PRESENTED) The router of claim 36, wherein the detecting means is configured for determining the delay based on measuring a time between transmitting a data packet onto the first link and receiving a response to the data packet via the first link.

40. (ORIGINAL) The router of claim 31, wherein the prescribed routing protocol is Enhanced Interior Gateway Routing Protocol (EIGRP) protocol.

41. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the detecting of the change in at least one of the prescribed attributes of the active path is based on a detecting a change

in a link attribute in any one of the first active link or the second active link, the change in the link attribute distinct from availability of the corresponding active link.

42. (PREVIOUSLY PRESENTED). The router of claim 11, wherein the detecting of the change in at least one of the prescribed attributes of the active path is based on a detecting a change in a link attribute in any one of the first active link or the second active link, the change in the link attribute distinct from availability of the corresponding active link.

43. (PREVIOUSLY PRESENTED) The medium of claim 21, wherein the detecting of the change in at least one of the prescribed attributes of the active path is based on a detecting a change in a link attribute in any one of the first active link or the second active link, the change in the link attribute distinct from availability of the corresponding active link.

44. (PREVIOUSLY PRESENTED) The router of claim 31, wherein the detecting of the change in at least one of the prescribed attributes of the active path is based on a detecting a change in a link attribute in any one of the first active link or the second active link, the change in the link attribute distinct from availability of the corresponding active link.